

In the Claims

Claims 1-66 (canceled).

Claim 67 (new): A semiconductor assembly, comprising:

a semiconductor substrate comprising a semiconductor material having a pair of conductively-doped diffusion regions extending therein; one of said pair of diffusion regions being a first diffusion region and the other of said pair of diffusion regions being a second diffusion region; the first diffusion region having a first outermost lateral periphery; the second diffusion region having a second outermost lateral periphery;

an insulative material over the substrate; the insulative material having a first opening extending therethrough to the first diffusion region and having a second opening extending therethrough to the second diffusion region; the first opening having an outermost lateral periphery coextensive with the first outermost lateral periphery, and the second opening having an outermost lateral periphery coextensive with the second outermost lateral periphery; the first opening having a bottom periphery comprising the first diffusion region, and the second opening having a bottom periphery comprising the second diffusion region;

a dielectric material within the first and second openings; the dielectric material being a first liner within the first opening and being a second liner within the second opening; the first liner being at the first outermost lateral periphery of the first diffusion region and extending entirely across the first diffusion region at the bottom periphery of the first opening; the second liner being at the second outermost lateral periphery of the

second diffusion region not extending across a predominant portion of the second diffusion region at the bottom periphery of the second opening;

conductive material plugs within the first and second openings; the conductive material plug within the first opening being a first conductive plug, and being spaced from the first diffusion region by the first liner; the conductive material plug within the second opening being a second conductive plug and being in direct physical contact with the second diffusion region; and

the first diffusion region, dielectric material within the first opening, and first conductive material plug together being incorporated into an anti-fuse construction.

Claim 68 (new): The semiconductor assembly of claim 67 wherein:

the insulative material has a planar uppermost surface;

the first and second liners have planar uppermost surfaces coplanar with the planar uppermost surface of the insulative material; and

the first and second conductive plugs have planar uppermost surfaces coplanar with the planar uppermost surface of the insulative material.

Claim 69 (new): The semiconductor assembly of claim 67 wherein the dielectric material comprises silicon nitride.

Claim 70 (new): The semiconductor assembly of claim 69 wherein the dielectric material has a thickness of from about 30Å to about 100Å.

Claim 71 (new): The semiconductor assembly of claim 67 wherein the first diffusion region is a p-type doped diffusion region.

Claim 72 (new): The semiconductor assembly of claim 67 wherein the first diffusion region is an n-type doped diffusion region.

Claim 73 (new): The semiconductor assembly of claim 67 wherein the first and second conductive plugs comprise conductively doped silicon.

Claim 74 (new): The semiconductor assembly of claim 67 wherein the first and second conductive plugs comprise at least one metal.

Claim 75 (new): The semiconductor assembly of claim 74 wherein the at least one metal includes tungsten.

Claim 76 (new): The semiconductor assembly of claim 74 wherein the at least one metal includes copper.

Claim 77 (new): The semiconductor assembly of claim 74 wherein the at least one metal includes aluminum.

Claim 78 (new): A semiconductor assembly, comprising:

a semiconductor substrate;

a pair of conductive nodes supported by the semiconductor substrate; one of said nodes being a first node and the other of said nodes being a second node;

an insulative material over the substrate; the insulative material having a first opening extending therethrough to the first node and having a second opening extending therethrough to the second node; the first opening having a bottom periphery comprising the first node, and the second opening having a bottom periphery comprising the second node;

a dielectric material within the first and second openings; the dielectric material being a first liner within the first opening and being a second liner within the second opening; the first liner being continuous across the first node at the bottom periphery of the first opening; the second liner having an opening extending therethrough to the second node;

conductive material plugs within the first and second openings; the conductive material plug within the first opening being a first conductive plug, and being spaced from the first node by the first liner; the conductive material plug within the second opening being a second conductive plug and extending through the opening in the second liner to be in direct physical contact with the second node;

the insulative material having a planar uppermost surface;

the second liner having a planar uppermost surface coplanar with the planar uppermost surface of the insulative material; and

the first node, dielectric material within the first opening, and first conductive material plug together being incorporated into an anti-fuse construction.

Claim 79 (new): The semiconductor assembly of claim 78 wherein:

the first and second conductive nodes are conductively-doped diffusion regions extending into a semiconductive material of the semiconductor substrate; the first conductive node being a first diffusion region and the second conductive node being a second diffusion region; and

the first liner extends across an entirety of the first diffusion region.

Claim 80 (new): The semiconductor assembly of claim 78 wherein the dielectric material comprises silicon nitride.

Claim 81 (new): The semiconductor assembly of claim 80 wherein the dielectric material has a thickness of from about 30Å to about 100Å.

Claim 82 (new): The semiconductor assembly of claim 78 wherein the first and second conductive plugs comprise conductively doped silicon.

Claim 83 (new): The semiconductor assembly of claim 78 wherein the first and second conductive plugs comprise at least one metal.

Claim 84 (new): The semiconductor assembly of claim 78 wherein the first and second electrical nodes are metallic.